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| Appl. No.  | : | 10/664,637  | Confirmation No.: | 5053 |
| Applicants | : | Morris G. Haney & Roy Thein   |                   |      |
| Filed      | : | 9/19/2003   |                   |      |
| Title      | : | Submersible Pump Drop Pipe and Casing Assembly Connection and Method of Manufacture |                   |      |
| Assignee   | : | Modern Products   |                   |      |
| TC/A.U.    | : | 3679  |                   |      |
| Examiner   | : | David Bochna  |                   |      |
| Docket No. | : | P-7627(DIV)   |                   |      |

### 37 CFR § 1.132 AFFIDAVIT OF MORRIS HANEY

I, Morris G. Haney, being duly sworn states the following:

1. I am over the age of twenty-one, and I am competent to make this affidavit, and I have personal knowledge of the facts stated herein.
2. I am one of the co-inventors of the above-identified application.
3. My father before me was in the pump and pipe manufacturing business, and I followed in his footsteps. I have been in the pump and pipe manufacturing business for over 40 years.
4. For over 30 years I have worked for Modern Products Industries, Inc. ("Modern Products"), or its predecessor companies. Modern Products is the assignee of the above-identified application. I am the general manager for Modern Products Industries, Inc.
5. Modern Products makes plastic pipe that is commonly used in the water well industry. I have personally been in charge of making plastic pipe for use in the water well industry for many years.
6. Modern Products is a relatively small company in the plastics pipe industry. In fact, the *Plastics News*' December 29, 2003 "Market Data Book," which ranked Modern Products in a seven-way-tie for 86<sup>th</sup> place among producers of pipe, profile, and tubing extrusion products, overestimated Modern Products' sales for the previous year by almost a factor of two.

7. For years, various pipe materials and various methods of connecting pipes have been used in the water well industry. It was common to find metal pipe such as galvanized steel used in combination with metal fittings or couplings to joint the pipe together. These galvanized metal pipes tended to corrode, causing leakage and breakage at the pipe joints. Stainless steel pipe has also been used. However, stainless steel pipe is typically too expensive for water well applications.

8. Plastic or PVC pipe has also been used in the water well industry for many years. In the past, separate PVC pipes have typically been connected with threaded plastic or metal couplings or with the use of cement or pipe dope. Connecting pipe with separate couplings or fittings or with the use of cement is particularly cumbersome and time consuming and, once again, the pipes tend to leak at the connections. In addition, the PVC pipe is typically rendered non-reusable.

9. Furthermore, many types of fittings have a tendency to crack or break, causing additional leakage. Others in the past have attempted to solve the problem by, for example, adding additional joints or fittings, but none of these alternative solutions were satisfactory, and they were more expensive and cumbersome than the present invention.

10. In general, the connections of water well pipes in water well applications are subjected not only to tensile and compressive forces, but also to lateral forces on the wall of the pipe in a direction perpendicular to the length of the pipe. These lateral forces can be caused by internal pressure or by bending the pipe during insertion and removal from the well. It is common in the industry for bending of the pipe to cause failure at the threads due to the combination of tensile, compressive, and lateral forces on the threads and at the walls of the threaded portion of the pipe, which are weaker due to the existence of the threads.

11. Roy Thein, the President and part owner of Modern Products Industries, Inc., and I recognized these problems with pipes and the pipe connections in the water well industry. In the spring and summer of 2001, Roy Thein and I came up with a new design for threaded PVC pipe which allowed for an exteriorly threaded male end of one pipe to be connected to an interiorly threaded, belled female end of a second pipe without the need for fittings or cement and which provide for lateral strength. The nonthreaded, outermost section of the female end acts to provide lateral strength to the connection of the pipes by receiving and withstanding the lateral forces created by bending of the pipe and thereby relieves the stress on the threads and the forces exerted on the weaker walls of the pipe opposite the interior threads.

12. Our newly designed PVC drop pipe had conventional male threads on one end and female threads on the other end (machined into a belled section) that did not require any couplings. The interiorly-threaded belled female end also had a lead-in section designed to add lateral strength to the pipe and funnel and align the male threads of a similar pipe into the female threads.

13. In September, 2001, Modern Products marketed this new design under the trade name Shur-Align.

14. The Shur-Align product met with tremendous commercial success in the market place. In 2002, Modern Products sold 2.8 million pounds (or \$1.8 million) of Shur-Align product – which accounted for 16.4% of Modern Products' sales revenues that year. In 2003, Modern Products sold 3.3 million pounds (or \$2.3 million) of the Shur-Align product – accounting for 23% of Modern Products' sales revenues that year. Our sales only leveled off when competitors took notice and started selling copies of the Shur-Align product,

notwithstanding the pendency and eventual issuance of U.S. Patent No. 6,666,480 ("the '480 patent").

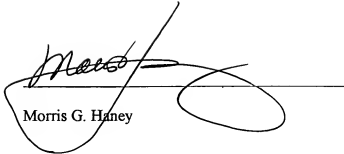
15. After our product was introduced in the market place, CertainTeed, one of the largest competitors in the industry, started copying our invention. Northern Pipe Products also began copying our product. I also learned from trade shows that other larger competitors – including PW Eagle, Inc. and Pipelife Jet Stream Inc., had announced intentions to develop their own imitation products.

16. It is apparent that but for our efforts to inform the industry of our pending patent rights, prior to issuance, and of our existing patent rights, after issuance, many other competitors would have introduced their own copies.

17. Based upon my 40 years of experience in the pump and pipe manufacturing business, it is clear that (a) there was a tremendous need in the industry for a water well pipe such as is described in the '480 patent; (b) there was a failure of others to solve the problem our invention solves; (c) our invention enjoyed immediate commercial success upon its introduction to market; and (d) others began copying the product.

18. I affirm under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge.

Further, Affiant sayeth not:

  
Morris G. Haney

STATE OF TEXAS

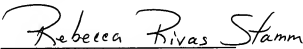
COUNTY OF BEE

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BEFORE ME, the undersigned authority, on this day personally appeared MORRIS G. HANEY, known to me to be the person of that name, who signed the foregoing instrument, and acknowledged the same to be his free act and deed.

GIVEN under my hand and seal of office this \_\_\_\_\_ day of November, 2005.

  
Notary Public

  
Printed Name of Notary

Commission Expires August 18, 2008

